

# Improvement roadmap

based on DMAIC



## Define the problem

Define improvement initiative from a customer's perspective with measurable problem and goal. Do not forget scope and constraints

- **Tools:** SIPOC, Kano, First Time Right, Blue Sky Vision, In/out of scope tool, Project charter
- **Essential:** Smart problem statement and goal, commitment from management



## Measure current process performance

Understand the process and support the Voice of the Customer/Business with measurements

- **Tools:** Swim lanes, VSM, Output and upstream metrics, Data collection plan
- **Essential:** Reliable measurement system, validated business case



## Analyze to find the root causes

Find the key factors (critical X's) that have an impact on the process performance and determine the root causes (Root Cause Analysis)

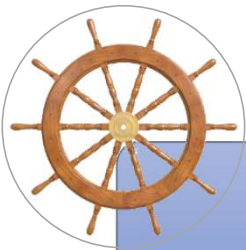
- **Tools:** Root cause analysis (Fishbone, 5Whys, A3), Hypothesis testing (*see backside of this Card for more information*)
- **Essential:** focus on the vital few, supported by facts



## Improve by implementing countermeasures

Find, select and implement countermeasures to eliminate root causes from appearing again

- **Tools:** Poka Yoke, Priority matrix, Stakeholder analysis
- **Essential:** acceptance and feasibility of countermeasures, validate effectiveness



## Control the new process

Validate if goal is reached and implement tools to safeguard new process performance

- **Tools:** Standardization, Huddles, Gemba, Visualization, KPIs
- **Essential:** clear responsibilities for line organization, validate results by Finance

Clear control plan? Process descriptions and SOPs updated? Responsibilities handed over?

and define a new improvement initiative again

